

REMARKS

The present Amendment and Response is intended to be fully responsive to all points of objections and/or rejections raised by the Examiner and is believed to place the application in condition for allowance. Applicants assert that the present invention is new, non-obvious and useful. Prompt reconsideration and allowance of the claims are respectfully requested.

Status of the Claims

Claims 1-20 are pending in the current application.

Claims 1-5, 7-12, 15, and 17 have been amended.

Applicants assert that the above amendments of claims are fully supported by the specification of record and add no new matter. For example, support may be found in at least Figure 3, which clearly illustrates that trench conductor 300 is in direct contact with the plurality of conductive carbon nanotubes 202.

Remarks to Claim Objections

The Office Action of March 8, 2010 objected claims 3, 5, 7-10, and 11-17 for various alleged informalities. Applicants have amended claims 3, 5, 7-10, and 11-17 in response to the above claim objections by specifically incorporating corrections that are suggested by the Office Action. In view of the above, Applicants respectfully request that the above claim objections be withdrawn.

Remarks to Claim Rejections

Claim Rejections - 35 USC §112

The Office Action of March 8, 2010 rejected claim 12 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the

Office Action alleges that there is insufficient antecedent basis for the limitation “said layer of trench dielectric” and “said bottom of said trench”.

Applicants have amended claim 12 to recite “a layer of trench dielectric” instead of “said layer of trench dielectric”, and to recite “a bottom of said one trench” instead of “said bottom of said trench”.

In view of the above amendment, it is respectfully requested that rejection of claim 12 under 35 U.S.C. §112, second paragraph be withdrawn.

Claim Rejections - 35 USC §103

The Office Action of March 8, 2010 rejected claims 1-3, 6-8, 10-11, 14-15, and 17-19 under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (US 2004/0043629) in view of Lee et al. (US 2002/0048143, “Lee”).

Without admitting any appropriateness of the above claim rejections, Applicants have amended independent claims 1, 2, and 11 to include additional distinctive feature of the present invention, for example, the trench conductor being “in direct contact with said multiple conductive nanotubes”. Applicants respectfully submit that at least the above distinctive feature, *inter alia*, is not taught, suggested, or implied by prior art references of record, in particular not taught, suggested or implied by Lee et al. and Lee.

For example, the alleged trench conductor 119 in Lee et al. is separated from the conductive material 115 by film 118, regardless whether it is appropriate to combine Lee with Lee et al. to allege that conductive material 115 may be conductive nanotubes. In other words, the alleged trench conductor 119 is not in direct contact with the “could-be” conductive nanotubes 115, contrary to what is specifically required by independent claims 1, 2, and 11 of the present invention.

According to MPEP 2142, in order to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In view of the above, Applicant respectfully submits that claims 1, 2, and 11 are not obvious over Lee et al. or Lee, alone or in combination, since a *prima facie* case

of obviousness against claims 1, 2, and 11 have not been properly established.

Claims 3, 6-7, and 10 depend from claim 1; claim 8 depends from claim 2; and claims 14-15 and 17-19 depend from claim 11. Thus, claims 3, 6-8, 10, 14-15, and 17-19 include all the distinct features of claims 1, 2, and 11, respectively, as well as additional distinguishing features and elements. Therefore, claims 3, 6-8, 10, 14-15, and 17-19 are patentable for at least the same reasons as discussed above with regard to claims 1, 2, and 11, respectively.

The Office Action of March 8, 2010 rejected claim 4-5, 12-13, and 20 as being un-patentable over Lee et al. and Lee, and further in view of Widmann et al. (US 2001/0012658).

Applicants respectfully disagree.

Claims 4-5 depend from claim 1; and claims 12-13 and 20 depend from claim 11. Thus, claims 4-5, 12-13, and 20 include all the distinct features of claims 1 and 11, respectively, as well as additional distinguishing features and elements. Therefore, claims 4-5, 12-13, and 20 are patentable for at least the same reasons as discussed above with regard to claims 1 and 11, respectively.

In view of the above, Applicants respectfully request that rejections of claims 1-20 made under 35 U.S.C. §103(a) be withdrawn.

Conclusion

In view of the preceding remarks, Applicants respectfully submit that all pending claims are now in condition for allowance. Favorable reconsideration and allowance of the claims are respectfully requested.

Applicants are paying a fee for filing the Request for Continued Examination. No other fees are believed to be due in connection with this paper. However, if there are any such other fees due, please charge any such fees to the deposit account No. 09-0458.

Respectfully submitted,

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